

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2004-266339

(43)Date of publication of application : 24.09.2004

(51)Int.Cl. H04B 10/02
H04B 10/18

(21)Application number : 2003-023973

(71)Applicant : JAPAN SCIENCE & TECHNOLOGY
AGENCY

(22)Date of filing : 31.01.2003

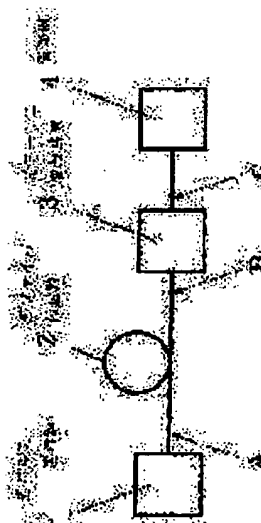
(72)Inventor : HIROOKA TOSHIHIKO
NAKAZAWA MASATAKA

(54) OPTICAL TRANSMISSION METHOD AND DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To compensate waveform distortion by using characteristic that, even if every linear distortion occurs on a time base, a spectrum shape is perfectly preserved.

SOLUTION: An optical pulse which has been transmitted via an optical fiber transmission path 2 from an optical pulse transmitter 1 is transmitted. An optical Fourier transforming device 3 compensates the waveform distortion by linear effects in the optical fiber transmission path 2 by making the optical pulse incident, performing optical Fourier transformation with the optical pulse on the time base onto a frequency axis, replacing frequency with time, and reproducing the frequency spectrum of the optical pulse on the time base. A photodetector 4 obtains the pulse waveform before transmission by the optical fiber transmission path 2 by receiving the optical pulse from the optical Fourier transforming device 3 and transforming this to an electrical signal.



LEGAL STATUS

[Date of request for examination] 14.02.2005

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]